

Jfu

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 6/2/06

Signature: *Susan Lanney*

(Susan Lanney)

Docket No.: WIBL-P01-013
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Mootha et al.

Application No.: 10/560501

Confirmation No.: 3194

Filed: December 12, 2005

Art Unit: 1614

For: METHODS OF REGULATING
METABOLISM AND MITOCHONDRIAL
FUNCTION

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Applicant submits herewith copies of references BA and CA-CL1 in accordance with 37 CFR 1.98(a)(2).

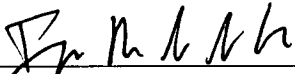
In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. WIBL-P01-013.

Dated: June 2, 2006

Respectfully submitted,

By 

Ignacio Perez de la Cruz

Registration No.: 55,535

ROPES & GRAY LLP

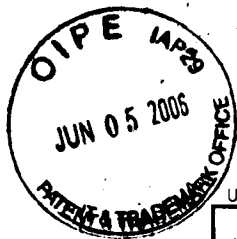
One International Place

Boston, Massachusetts 02110-2624

(617) 951-7000

(617) 951-7050 (Fax)

Attorneys/Agents For Applicant



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Application No. (if known): 10/560501

Attorney Docket No.: WIBL-P01-013

Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on June 2, 2006
Date

Signature

Susan Lanney

Typed or printed name of person signing Certificate

Registration Number, if applicable

Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

IDS (Citation) by Applicant (46 References) (3 pages)
Copies of Cited References BA and CA-CL1)
Return Receipt Postcard



PTO/SB/08a/b (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Complete if Known		
			Application Number	10/560501	
			Filing Date	December 12, 2005	
			First Named Inventor	Vamsi Krishna Mootha	
			Art Unit	4614 1632	
			Examiner Name	Not Yet Assigned J. Hama	
Sheet	1	of	3	Attorney Docket Number	WIBL-P01-013

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
↓ ↓ ↓ ↓ ↓ ↓ ↓	AA	US-2002/0049176	04-25-2002	Anderson	
	AB	US-2002/0064773	05-30-2002	Hernstadt	
	AC	US-2002/0127536	09-12-2002	Aprille	
	AD	US-5,602,009	02-11-1997	Evans et al.	
	AE	US-6,453,242-B1	09-17-2002	Eisenberg et al.	
	AF	US-6,511,808	01-28-2003	Wolfe et al.	
	AG	US-6,607,882	08-19-2003	Cox, III et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
/JH/	BA	WO-03/068944	08-21-2003	Dana-Farber Cancer Institute, Inc.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
↓ ↓ ↓ ↓ ↓ ↓ ↓	CA	BATCHELOR, A.H., et al., "The Structure of GABP Alpha/Beta: An ETS Domain-Ankyrin Repeat Heterodimer Bound to DNA," Science, 279(5353):1037-1041 (1998).	
	CB	BJORNTORP, P., et al., "Respiration and Phosphorylation of Mitochondria Isolated from the Skeletal Muscle of Diabetic and Normal Subjects," Diabetologia, 2:346-352 (1966).	
	CC	CHINENOV, Y., et al., "Isolation of a bi-directional promoter directing expression of the mouse GABP α and ATP synthase coupling factor 6 genes," Gene, 261:311-320 (2000).	
	CD	EISEN, M.B., et al., "Cluster analysis and display of genome-wide expression patterns," PNAS, 95:14863-14868 (1998).	
	CE	ERIKSSON, K.F., et al., "Impaired glucose tolerance in a middle-aged male urban population: a new approach for identifying high-risk cases," Diabetologia, 33:526-531 (1990).	
	CF	GOLUB, T.R., et al., "Molecular Classification of Cancer: Class Discovery and Class Prediction by Gene Expression Monitoring," Science, 286(5439):531-537 (1999).	
	CG	HARA, K., et al., "A genetic variation in the PGC-1 gene could confer insulin resistance and susceptibility to Type II diabetes," Diabetologia, 45:740-743 (2002).	
	CH	HERZIG, S., et al., "CREB regulates hepatic gluconeogenesis through the coactivator PGC-1," Nature, 413:179-183 (2001).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/560501	
			Filing Date	December 12, 2005	
			First Named Inventor	Vamsi Krishna Mootha	
			Art Unit	1614	
			Examiner Name	Not Yet Assigned	
Sheet	2	of	3	Attorney Docket Number	WIBL-P01-013

/JH/	CI	HUSS, J.M., et al., "Peroxisome Proliferator-activated Receptor Coactivator-1 α (PGC-1 α) Coactivates the Cardiac-enriched Nuclear Receptors Estrogen-related Receptor- α and - γ ," J. Biological Chemistry, 277(43):40265-40274 (2002).	
	CJ	JOHNSTON, S.D., et al., "Estrogen-Related Receptor α 1 Functionally Binds as a Monomer to Extended Half-Site Sequences Including One Contained within Estrogen-Response Elements," Mol. Endocrinol., 11:342-352 (1997).	
	CK	KAMEI, Y., et al., "PPAR γ coactivator 1 β /ERR ligand 1 is an ERR protein ligand, whose expression induces a high-energy expenditure and antagonizes obesity," PNAS, 100(21):12378-12383 (2003).	
	CL	KROPF, S., et al., "Multiple Tests for Different Sets of Variables Using a Data-Driven Ordering of Hypotheses, with an Application to Gene Expression Data," Biometrical Journal, 44(7):789-800 (2002).	
	CM	LEWIS, S., et al., "Annotating eukaryote genomes," Curr. Opin. Struc. Biol., 10:349-354 (2000).	
	CN	LIN, J., et al., "Transcriptional co-activator PGC-1 α drives the formation of slow-twitch muscle fibres," Nature, 418:797-801 (2002).	
	CO	LIU, G., et al., "Net Affx: Affymetrix probesets and annotations," Nucleic Acids Research, 31(1):82-86 (2003).	
	CP	LUO, J., et al., "Reduced Fat Mass in Mice Lacking Orphan Nuclear Receptor Estrogen-Related Receptor α ," Molecular and Cellular Biology, 23(22):7947-7956 (2003).	
	CQ	MAGLOTT, D.R., et al., "NCBI's LocusLink and RefSeq," Nucleic Acids Research, 28(1):126-128 (2000).	
	CR	MOOTHA, V.K., et al., "Identification of a gene causing human cytochrome c oxidase deficiency by integrative genomics," PNAS, 100(2):605-610 (2003).	
	CS	MOOTHA, V.K., et al., "PGC-1 α -responsive genes involved in oxidative phosphorylation are coordinately downregulated in human diabetes," Nature Genetics, 34(3):267-273 (2003).	
	CT	PATTI, M.E., et al., "Coordinated reduction of genes of oxidative metabolism in humans with insulin resistance and diabetes: Potential role of PGC1 and NRF1," PNAS, 100(14):8466-8471 (2003).	
	CU	PETERSEN, K.F., et al., "Mitochondrial Dysfunction in the Elderly: Possible Role in Insulin Resistance," 300(5622):1140-1142 (2003).	
	CV	PUIGSERVER, P., et al., "A Cold-Inducible Coactivator of Nuclear Receptors Linked to Adaptive Thermogenesis," Cell, 92:829-839 (1998).	
	CW	PUIGSERVER, P., et al., "Peroxisome Proliferator-Activated Receptor- γ Coactivator 1 α (PGC-1 α): Transcriptional Coactivator and Metabolic Regulator," Endocrine Reviews, 24(1):78-90 (2003).	
	CX	RUSSELL, A.P., et al., "Endurance Training in Humans Leads to Fiber Type-Specific Increases in Levels of Peroxisome Proliferator-Activated Receptor- γ Coactivator-1 and Peroxisome Proliferator-Activated Receptor- α in Skeletal Muscle," Diabetes, 52:2874-2881 (2003).	
	CY	SCARPULLA, R.C., "Nuclear activators and coactivators in mammalian mitochondrial biogenesis," Biochimica et Biophysica Acta, 1576:1-14 (2002).	
	CZ	SCHARFE, C., et al., "MITOP, the mitochondrial proteome database: 2000 update," Nucleic Acids Research, 28(1):155-158 (2000).	
	CA1	SCHREIBER, S.N., et al., "The Transcriptional Coactivator PGC-1 Regulates the Expression and Activity of the Orphan Nuclear Receptor Estrogen-Related Receptor α (ERR α)," J.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/560501	
			Filing Date	December 12, 2005	
			First Named Inventor	Vamsi Krishna Mootha	
			Art Unit	1614	
			Examiner Name	Not Yet Assigned	
Sheet	3	of	3	Attorney Docket Number	WIBL-P01-013

		Biological Chemistry, 278(11):9013-9018 (2003).	
/JH/	CB1	SIMONEAU, J.A., et al., "Skeletal muscle glycolytic and oxidative enzyme capacities are determinants of insulin sensitivity and muscle composition in obese women," FASEB J., 9:273-278 (1995).	
	CC1	SREEKUMAR, R., et al., "Gene Expression Profile in Skeletal Muscle of Type 2 Diabetes and the Effect of Insulin Treatment," Diabetes, 51:1913-1920 (2002).	
	CD1	STOREY, J.D., "A direct approach to false discovery rates," J.R. Statist. Soc. B, 64(3):479-498 (2002).	
	CE1	SU, A.I., et al., "Large-scale analysis of the human and mouse transcriptomes," PNAS, 99(7):4465-4470 (2002).	
	CF1	TAMAYO, P., et al., "Interpreting patterns of gene expression with self-organizing maps: Methods and application to hematopoietic differentiation," PNAS, 96:2907-2912 (1999).	
	CG1	TAYLOR, S.W., et al., "Characterization of the human heart mitochondrial proteome," Nature Biotechnology, 21:281-286 (2003).	
	CH1	TUSHER, V.G., et al., "Significance analysis of microarrays applied to the ionizing radiation response," PNAS, 98(9):5116-5121 (2001).	
	CI1	VIRBASIS, J.V., et al., "Activation of the human mitochondrial transcription factor A gene by nuclear respiratory factors: A potential regulatory link between nuclear and mitochondrial gene expression in organelle biogenesis," PNAS, 91:1309-1313 (1994).	
	CJ1	WU, Z., et al., "Mechanisms Controlling Mitochondrial Biogenesis and Respiration through the Thermogenic Coactivator PGC-1," Cell, 98:115-124 (1999).	
	CK1	YANG, X., et al., "Microarray profiling of skeletal muscle tissues from equally obese, non-diabetic insulin-sensitive and insulin-resistant Pima Indians," Diabetologia, 45:1584-1593 (2002).	
	CL1	YOON, J.C., et al., "Control of hepatic gluconeogenesis through the transcriptional coactivator PGC-1," Nature, 413:131-138 (2001).	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Joanne Hama/	Date Considered	06/05/2008
--------------------	---------------	-----------------	------------